

# **Plutonium Finishing Plant Project**

## **G. W. Jackson, Vice President/(509) 373-6622**

***Residues Stabilization  
Mixed Oxide Stabilization  
Completed April 1***



***Rooms 336/337  
Ready for Demolition Activities***



## OVERVIEW

The Plutonium Finishing Plant Project is responsible for work in Project Baseline Summary (PBS) RL-CP03, *Plutonium Finishing Plant (PFP)*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of April 2003.

## NOTABLE ACCOMPLISHMENTS

### Maintain Safe and Secure Special Nuclear Material (SNM)

Material was moved into International Atomic Energy Agency (IAEA) Vault #3, successfully completing move number two. PFP is awaiting the IAEA to conduct random selection and verification measurements, which will complete the material swap.

In support of off-site shipments to Savannah River Site (SRS) and acquiring National Nuclear Security Administration approval to use safe and secure transporters, a demonstration for opening, inspecting, packaging and leak testing 9975 containers was witnessed by RL. Comments from RL will be incorporated into procedures.

### Maintain Safe and Compliant PFP

Criticality non-conformance issues with the contents of tank D8 in 241-Z Facility were resolved, allowing waste transfers from the main facility to resume.

### Stabilization of Nuclear Materials

**Metals, Alloys, Oxides and Polycubes:** Two hundred fourteen oxide items were processed during the reporting period. As of April 20, 2003, 1,218 oxide items have been processed under the 2736-ZB fiscal year (FY) 2003 work scope. This surpassed our year-to-date goal by 73 items.

#### Residues

- During the reporting period, 7,670 grams of oxide/Mixed Oxide were packaged into seven pipe overpack containers.
- Calorimeter AR-5 was qualified for Waste Isolation Pilot Plant and safeguards measurements.
- The last of the remaining sand, slag and crucible items were measured.

**Outer Can Packaging:** A total of eighty 3013 containers were produced during this reporting period. A total of five hundred fifty one 3013 containers have been produced during this fiscal year, 97 containers ahead of the FY 2003 production baseline.

### Disposition PFP Facility

**Decontamination and Decommissioning (D&D) Crosscut:** A training needs analysis and training plan were developed to support the PFP mission transition from stabilization and packaging to decommissioning.

**Transition 232-Z Facility:**

- The *Notice of Construction* for 232-Z was transmitted to RL on April 18, 2003.
- The 232-Z Engineering Evaluation/Cost Analysis was transmitted to RL on April 23, 2003.
- Pre-D&D housekeeping and maintenance activities have continued. Forty-eight of the 60 gloves in the glove boxes were changed out.
- The 232-Z Documented Safety Analysis (DSA) implementation and facility decommissioning readiness activities progressed. DSA implementation is planned to be completed the second half of May, 2003.

**Transition 234-5Z Facility:** The Residues Team has developed an Activity Based Management Review checklist for packaging legacy hold-up material.

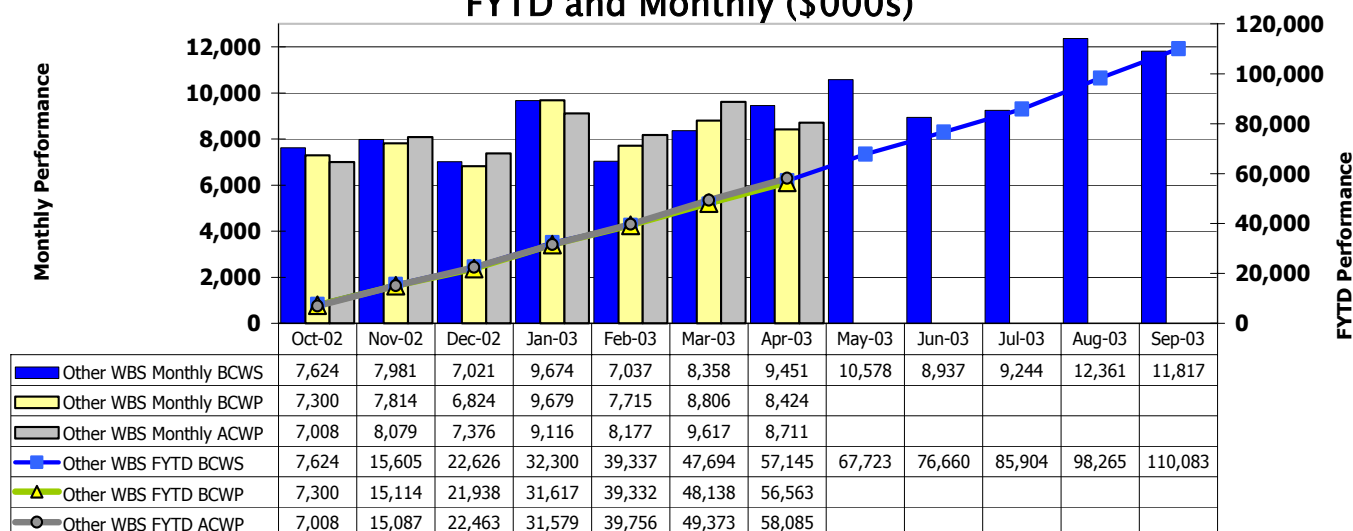
## FY 2003 SCHEDULE/COST PERFORMANCE (\$000)

**Schedule Variance (-\$582K/-1%):** Variances are within the threshold (+/- 10% or \$1M), therefore no variance analysis is provided.

**Cost Variance (-\$1,522K/-3.0%):** The negative cost variance of -\$1,522K is attributed to the following three items: under-estimated cost of the re-calibration for the pressure gauges, task close-out for 3013 canister monitoring system, and under-estimated cost of project management and support costs. The above negative cost variances are offset by better than expected productivity within the planning process of *Disposition PFP Facility*, labor under runs in Disposition SNM, and productivity improvements in Stabilization. PFP will continue to apply internal management controls on staff hiring, subcontracts, procurements and overtime to mitigate existing cost overruns.

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-CP03 Plutonium Finishing Plant	57,145	56,563	58,085	-582	-1%	-1,522	-3%	110,083

### Performance Analysis FYTD and Monthly (\$000s)



## MILESTONE ACHIEVEMENT

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-03-501	Submit Facility End Point Criteria Document to Ecology	TPA	9/30/03			On Schedule
TRP-03-503	Submit to Ecology a PFP Residual Chemical Hazards Assessment	TPA	12/31/02	12/27/02		Complete
TRP-03-504	Submit Closure Plan for 241-Z Waste Treatment Facility TSD Unit to Ecology	TPA	7/31/03			On Schedule
TRP-04-506	Completion of all Pu Stabilization & Packaging	PI	2/18/04			On Schedule
TRP-04-508	Complete Repackaging of PFP Residues and Ship to CWC	TPA	4/30/04			On Schedule
TRP-05-501	Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms	TPA	6/30/05			On Schedule
TRP-05-503	Special Nuclear Material Transferred to Savannah River Site of DOE Approved Interim Storage	PI	9/30/05			On Schedule
TRP-05-504	Legacy Pu Holdup Removed & Dispositioned	PI	9/30/05			On Schedule
TRP-06-501	Complete 100% of Legacy Pu Holdup Removal & Disposition	TPA	9/30/06			On Schedule
TRP-06-502	Complete Transition & Dismantlement of the 232-Z Bldg Incinerator	TPA	9/30/06			On Schedule
TRP-06-503	Protected Area Eliminated	PI	12/31/05			On Schedule
TRP-06-507	PFP Facilities (61 Buildings) Ready For Demolition	PI	9/30/06			On Schedule

## FY 2003 FH FUNDS VS FORECAST (\$000)

	Expected Funds	Spend Forecast	Variance
<b>RL-CP03</b> Plutonium Finishing Plant			
<b>Project Completion - Operating</b>	\$ 109,248	\$ 109,900	\$ (652)

## ISSUES

**Shipment of the first 3013 containers to SRS:** PFP continues working with DOE (RL, HQ and SRS) to resolve and complete all activities needed to make the first shipment of material from PFP to SRS. FH's goal is to make one shipment in FY 2003 to verify readiness.